REMARKS:

Careful consideration has been given to the Official Action of January 6, 2010 and reconsideration of the application as now presented is requested.

Claims 1, 3-12, and 17-22 stand rejected under 35 USC 112, first paragraph as being allegedly failing to comply with the enablement requirement.

Claims 1, 3-12, and 17-22 stand rejected under 35 USC 112, second paragraph, as being allegedly indefinite.

Claims 1, 3-12, and 17-22 further stand rejected under 35 USC 103(a) as being allegedly obvious over Suda (US Patent No. 6,613,177) in view of at least one of Malin (EP619170), Yoshioka (JP 8-127083), and Suda JP (JP 2000-159399).

To clarify the invention, the paragraph that begins on page 7, line 6 has been corrected to refer to the "band" distance instead of the "center-to-center" distance. This appears to be the cause for the inconsistency and confusion noted by the Examiner, and it is respectfully submitted that one skilled in the art would clearly recognize this obvious error (and understand what was intended is now set out in the amendment) based on the original description. For example, as discussed in the second paragraph prior, which begins on page 6, line 21, the present application noted that dimensions of the final breaker ply can be "corrected by adjusting the mutual distance of the bands" (see page 6, lines 22-27). The following paragraph, which begins on page 7, line 1, discusses the scenario in which the

bands exactly abut each other. Then the present paragraph, which begins on page 7, line 6, was intended to discuss the scenarios when the mutual distance of the bands (or "band distance") is increased or decreased and the resulting length of the breaker ply. Further support can be found, for example, in the paragraph that begins at page 4, line 9: "...and the mutual distance of the bands is each time adjusted for realising a pre-set breaker ply length..." (Page 4, lines 25-26), page 10, lines 17-20, and page 21, lines 11-15 "However, by adjusting the distance within limits, it will also be possible to adjust the overall length of a breaker ply a little. For instance, when the breaker ply is built up from 40 bands, an increase of the mutual distance between the bands by 0.2 mm will render the breaker ply 8 mm longer".

Claim 1 has been amended to clarify that the center-to-center distance is "pre-set" as discussed in the present application, i.e. the present invention does not adjust the center-to-center distance between the cords in the continuous rubber strip during the manufacturing thereof. Accordingly, the center-to-center distance of cords within the bands will remain substantially constant during manufacturing.

Moreover, claim 1 has been amended to clarify that the control device is adapted for controlling the drive for adjustably moving the support surface of the second transport device to adjust a band distance between adjacent bands. Support for this can be found at, for example, page 5, lines 19-22; page 6, lines 26-27; and page 10, lines 16-20.

Claims 3 and 6 have been amended to replace "transfer distance" by "band distance" which finds antecedent support in the amended claim 1. Claims 3 and 6 have also been amended to depend on claims 1 and 5, respectively, rather than on claim 2, which had been

canceled.

Claim 19 has been amended to recite the second "transport device" which finds antecedent support in claim 1.

Claim 41 has been added to recite a butt-splicer for butt-splicing the bands together. Support for this can be found at, for example, page 19, lines 8-10.

As discussed above, the claimed invention is directed to a device for producing a breaker ply in which the band distance between adjacent bands can be adjusted and controlled to form a desired breaker ply length. Specifically, by increasing the band distance, the breaker ply length can be increased and vice versa while using a specific number of bands. Preferably, the band distance is at most equal to the center-to-center distance of the cords or 20% of the center-to-center distance of the cords to reduce any imbalance in the final tire. See, for example, page 22, line 30 - page 23 line 2. Consequently, the bands do not abut, and the center-to-center distance between the end cords of the adjacent bands is likely to be different from the center-to-center distance between cords within a band. It should be noted that the claimed invention provides a device for producing a breaker ply in which the bands are spaced apart by a band distance. Consequently, the bands do not overlap and are not necessarily joined before being transported onto the drum.

As recited in claims 5 and 6, the adjustability of the band distance of the claimed invention allows the measuring of the breaker ply length and adjusting the band distance based on the measured length of the ply during manufacturing. This is possible because the

bands are positioned without abutting or overlapping (i.e. at a band distance), there is more room for adjustment of the band distance during manufacture, without creating overlapping portions in the breaker ply.

In contrast, the cited references are directed to devices in which the bands are joined in an overlapping fashion (i.e. not spaced from one another at a distance as required by the claimed invention).

Specifically, Suda discloses computing means for deciding the number of bands to be joined by overlapping the ends of adjacent bands based on the breaker ply length, and calculating a moving pitch amount in the repetitive movement of the strip piece through the conveyor, and control means for controlling the movement of the conveyor based on the band number, and moving pitch amount decided by the computing means (column 3, lines 23-35). As can be seen in Figs. 7-9, Suda requires the bands to be overlapping so as to be joined.

Malin is directed to a method for manufacturing a reinforcement member for a tire by joining bands by overlapping the ends of adjacent bands. The bands are provided with cords at a uniform spacing such that the center-to-center distance within a band is d, and each edge of a band is set at a distance of about ½ d from its closest cord. This results in a center-to-center distance between adjacent cords at the joint which is substantially equal to the center-to-center distance within the bands (column 10, lines 20-26 and Figs. 11-12). Malin does not teach or suggest a device for positioning the bands at a distance from each other, or a calculating unit for calculating a band number and the band distance based on the center-to-center distance, the strip width and the breaker ply length.

Similarly, Yoshioka and Suda JP both describe joining adjacent bands by overlapping the ends of adjacent bands, and describe that the amount of overlap can be adjusted.

Accordingly, since none of the cited references, taken singly or in combination, teaches or suggests a control device adapted for controlling the drive for adjustably moving the support surface of the second transport device to adjust a band distance between adjacent bands or a calculating unit for calculating the band distance based on the center-to-center distance, the strip width and the breaker ply length, the cited references cannot support a *prima facie* case of obviousness.

For the sake of argument, even if one skilled in the art were to combine the cited references in the manner proposed by the Examiner, it would not lead to the claimed invention. Instead, it is respectfully submitted that such a combination would provide a device for joining bands such that the center-to-center distance between the end cords of adjacent bands is substantially equal to the center-to-center distance between the cords within a band (see for example Fig. 12 of Malin). Morever, such a combination would only describe pre-calculating the moving pitch amount in a constant and repetitive movement of the strip piece, and would not be adapted for adjustment during the production of a breaker ply.

New claim 41 recites a butt-splicer for butt-splicing the bands together. It is noted that butt-splicing, is well known in the art as splicing non-overlapping pieces together. This further distinguishes the claimed invention from the overlapping bands of the cited references.

In view of the above, Applicants respectfully submit that all rejections and objections of record have been overcome and that the application is now in allowable form. An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,

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